

DRILL HOLE INSPECTION METHOD FOR PRINTED CIRCUIT BOARD FABRICATION

ABSTRACT OF THE DISCLOSURE

The automated inspection of features on printed circuit boards is compatible with automated manufacturing technology and greatly speeds the production of useful boards. One printed circuit board feature that can be difficult to inspect is the placement of holes surrounded by pad material. The present invention provides a more robust method and apparatus for inspecting holes to determine if they are surrounded by a pad material. Hole Images are processed to highlight the hole and adjacent pad material. Automated design and manufacturing data is combined with an indication of what forms an acceptable hole based on surface area measurement of pad material on the printed circuit board. The method and apparatus then compares measured areas with a calculated error threshold to determine if the hole is placed within an acceptable region of the printed circuit board. The invention also includes computer readable media containing programs to execute the methods of the invention